REMARKS

This Response, submitted in response to the non-final Office Action dated June 29, 2005, is believed to be fully responsive to the points of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1, 3, 4, 8-10, 12-15, 18-23, 33-39 and 41 are pending. Claims 3, 4, 8-10, 13-15 and 18-23 have been allowed. Claims 1, 39 and 41 have been rejected under 35 USC 103(a) over US Patent No. 5,587,591 (Kingsley), in view of US Patent No. 6,717,152 (Izumi). Claim 12 has been rejected under 35 USC 103(a) over Kingsley, in view of Izumi, in further view of US Patent No. 6,867,418 (Suzuki). Claims 33 and 38 have been rejected under 35 USC 103(a) over US Patent No. 5,519,751 (Yamamoto). Claims 34-36 have been rejected under 35 USC 103(a) over Yamamoto, in view of U.S. Patent No. 6,636,581 (Sorenson). Claim 37 has been rejected under 35 USC 103(a) over Yamamoto, in view of US Patent No. 3,775,612 (Foster). Applicants respectfully submit the following remarks in support of the patentability of the claims.

1. Claims 1, 39 and 41:

Claims 1, 39 and 41 have been rejected under 35 USC 103(a) over Kingsley, in view of Izumi. Previously presented Claim 1 recites in part that each of the TFTs includes a gate electrode, a semiconductive region comprising an organic semiconductor and disposed over the gate electrode, and a source electrode and a drain electrode in contact with the semiconductive region. Applicants respectfully submit that neither Kingsley nor Izumi discloses this recitation. In particular, neither reference discloses a semiconductive region comprising an organic semiconductor. Organic semiconductors are discussed on paragraph 32 on page 8 of the present application, and examples of organic semiconductors include pentacene, naphthacene, Cu-phthalocyanine, and alpha-sexithienyl.

The Examiner cites Col. 5, lines 12-16 of Kingsley as disclosing a semiconductive region comprising an organic semiconductor and disposed over the gate electrode. However, Col. 5, lines 12-16 of Kingsley discuss the disposition of a dielectric material (either organic or inorganic) over the TFT. This cited portion does not teach or suggest a semiconductive region comprising an organic semiconductor, as recited by Claim 1. On

the contrary, Kingsley teaches that the semiconconductive region typically comprises amorphous silicon, which is inorganic. (See, for example, Col. 4, line 67-Col. 5, line 3 of Kingsley.)

Further, as noted in Applicants' Amendment dated February 16, 2004, Izumi teaches that the TFT element 4 is either a-Si or p-Si, neither of which is an organic semiconductor. As was further noted in the February 16, 2004 Amendment, semiconductor film 2, 12, 26 of Izumi is employed in direct conversion imagers and is unrelated to the semiconductive region of the TFTs. Accordingly, the discussion in Col. 11, lines 45-54 is not germane.

Previously presented Claim 39 recites that each of TFTs includes a gate electrode, a semiconductive region comprising an organic semiconductor and disposed over the gate electrode, and a source electrode and a drain electrode in contact with the semiconductive region. Claim 41 depends from Claim 39. Applicants respectfully submit that the arguments presented above with respect to Claim 1 apply with equal force to Claims 39 and 41.

Accordingly, Claims 1, 39 and 41 are patentably distinguishable over the cited art, and withdrawal of the rejections under 35 USC 103(a) is respectfully requested.

2. Claim 12:

Claim 12 has been rejected under 35 USC 103(a) over Kingsley, in view of Izumi, in further view of Suzuki. Claim 12 depends from Claim 1 and is thus patentably distinguishable over Kingsley, in view of Izumi, for at least the reasons presented above with respect to Claim 1.

The Examiner cites Suzuki as teaching a cover layer disposed over the scintillator. However, Suzuki does not supply the above-discussed deficiencies of Kingsley and Izumi. Accordingly, Claim 12 is patentably distinguishable over the cited art, and Applicants respectfully request that the rejection of Claim 12 under 35 USC 103(a) be withdrawn.

3. Claims 33 and 38:

Claims 33 and 38 have been rejected under 35 USC 103(a) over Yamamoto. Claim 33 is directed to a digital imaging method for imaging a subject, the digital imaging method including embedding at least one digital imager in the subject, activating a radiation source to expose the subject to a diverging radiation beam, a portion of the subject being positioned between the radiation source and the digital imager and collecting an image with the digital imager. Embedding is discussed in the present application at paragraphs 46 and 47 on pages 15 and 16 and an example of embedding is shown in FIG. 11 of the present application. Claim 38 depends from Claim 33 and further recites that the embedding step comprises embedding a number of digital imagers in the subject.

In contrast, Yamamoto does not teach or suggest embedding at least one digital imager in the subject, as recited by Claim 33. Rather, Yamamoto is directed to dental applications and shows in FIG. 1 and states in Col. 3, line 67-Col. 4, line 1, that the sensor 3 is positioned behind the tooth. Applicants respectfully submit that the subject in Yamamoto is the tooth, not the mouth, as the tooth is being imaged, not the mouth. To the extent that it is implied in the Examiner's arguments, Applicants respectfully disagree with the implication that Yamamoto somehow suggests embedding sensor 3 in the patient's tooth. In view of the fact that Yamamoto neither teaches nor suggests embedding at least one digital imager in the subject, as recited by Claim 33, Applicants respectfully request that the rejection of Claims 33 and 38 over Yamamoto be withdrawn.

4. Claims 34-36:

Claims 34-36 have been rejected under 35 USC 103(a) over Yamamoto, in view of Sorenson. Claims 34-36 depend from Claim 33, which recites in part, embedding at least one digital imager in the subject. In contrast, Yamamoto teaches positioning a sensor 3 behind a tooth 2 (FIG. 1 and Col. 3, line 67-Col. 4, line 1).

Claim 34 further recites that the subject comprises a section of an aircraft structure. The subject in Yamamoto is a tooth, and Yamamoto does not teach or suggest the additional recitation of Claim 34. The Examiner cites Sorenson to supply this latter deficiency of Yamamoto. However, Sorenson does not teach or suggest embedding at least one digital imager in a subject comprising a section of an aircraft structure. Rather, Sorenson is directed to a gantry system for moving a detector around a fuselage.

Claim 35 depends from Claim 34 and further recites that the subject comprises a fuselage, and that the embedding step comprises embedding the digital imager between

the fuselage and an insulation layer. Claim 36 depends from Claim 34 and further recites that the subject comprises an aircraft wing, and that the embedding step comprises embedding the digital imager within the aircraft wing. In contrast to both of these claims, Yamamoto positions a sensor 3 behind a tooth and Sorenson uses a gantry system to move a detector around a fuselage. Accordingly, Yamamoto and Sorenson do not teach or suggest these recitations of Claims 35 or 36.

In view of the fact that Yamamoto and Sorenson neither fail to disclose any of these recitations of Claims 34-36, Applicants respectfully request that the rejections of Claims 34-36 over Yamamoto be withdrawn.

5. Claim 37:

Claim 37 has been rejected under 35 USC 103(a) over Yamamoto, in view of Foster. Claim 37 depends from Claim 33, which recites in part, embedding at least one digital imager in the subject. In contrast, Yamamoto teaches positioning a sensor 3 behind a tooth 2 (FIG. 1 and Col. 3, line 67-Col. 4, line 1).

Claim 37 further recites that the subject comprises a section of a pipeline. The subject in Yamamoto is a tooth, and Yamamoto does not teach or suggest the additional recitation of Claim 34. The Examiner cites Foster to supply this latter deficiency of Yamamoto. The Examiner cites Foster as showing the use of x-ray imaging to inspect pipe welds (Abstract). However, Foster is directed to a pipeline crawler for moving a radiographic unit attached to the crawler through the pipeline (Abstract). Foster does not disclose embedding a digital detector in the pipeline. Rather, Foster teaches placing a film over the weld outside the wall (Col. 9, lines 23-24). Accordingly, Applicants respectfully submit that Claim 37 is patentably distinguishable over the cited art, for at least these reasons, and request that the rejection of Claims 37 be withdrawn.

In view of the above, Applicants respectfully submit that all of the pending claims 1, 3, 4, 8-10, 12-15, 18-23, 33-39 and 41 are in condition for allowance.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Please charge all applicable fees associated with the submittal of this Amendment and any other fees applicable to this application to the Assignee's Deposit Account No. 07-0868.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

Penny A. Clarke
Reg. No. 46, 627

General Electric Company
Building K1, Room 3A72
Schenectady, New York 12301
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Telephone: (518) 387-5349